## Introduction<sup>1</sup>

There are a wide variety of mineral resources found in San Luis Obispo County, although only a few minerals are presently being extracted commercially. Mining has played an important and colorful role in the county's history, including a brief gold rush at Pozo in the 1870's and the later discoveries of mercury in the Santa Lucia Range. In recent years, the mineral products of the county have included petroleum, natural gas, mercury, gypsum, sand and gravel, construction stone, and clay.

Local mines provide a significant contribution to the county's economy. However, a number of conservation problems and issues are involved with local mineral resources. First, there are the problems caused by old abandoned mines, which mar the scenery and cause pollution. Second, there are the issues related to mines now in operation, including pollution at the site as well as noise and dust from trucks on access roads. The question of allowing new mines and quarries is a basic issue now facing the county.

## **Historical Perspective**

Although the annals of San Luis Obispo County history will tell about the dominance of an agrarian society and economy, it will tell little of the exploitation of its mineral resources. However, from the earliest days, settlers of this county have attempted to capitalize on the various mineral types as they were found to exist.

Although the first commercial enterprises were suspected to be carried out by the Spanish in their quest for silver and gold, coal was the object of the first actual mining company incorporated in the county. This was the San Simeon Coal Mining Company, which was organized in 1863. A short time later, there occurred a great demand for copper in munitions and the subsequent high prices during the Civil War initiated the opening of several copper mines in the county. During the same period of exploration, rich quicksilver-bearing ores were discovered in the mountains east of San Simeon. This discovery near the Josephine Mine set off a flurry of activity throughout that area. The founding of the Oceanic Mining Company followed in 1874 for the extraction of very rich cinnabar deposits east of Cambria. Although the coal and copper industries folded quickly, a number of quicksilver mines continue to operate.

As with the rest of California, this county also experienced a late 19<sup>th</sup> century gold rush, although proportionally very minor. A location in the La Panza Range was the object of this hunt to recover the fine gold placer deposits. These workings, however, were never of much economic value to the county, although there was again some activity during the 1930's.

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<sup>&</sup>lt;sup>1</sup> The information in this appendix is excerpted from the 1974 Conservation Element.

During the 1870's, chromite, the second most important mineral in the county's past also came into production. The richest deposits were found at the mountainous headwaters of Chorro Creek, near San Luis Obispo. Since the market failed in chromite following World War I, there has only been intermittent activity of this mineral resource. Other past mining activities have included workings of the large bituminous sandstone deposits; the various construction stones, sands and gravels; and the extraction of oil. The principal developed mineral resources of San Luis Obispo County in recent years have been gypsum, clay, natural gas, petroleum, mercury, construction stone, sand, and gravel. Of these resources, sand and gravel remains a principal mineral resource in the county to this day.

## **Economic Contributions<sup>2</sup>**

Even though there are a wide variety of mineral resources in the county, production in 2007 was valued at about \$7 million. The contribution made by mining activities to the total county economy is relatively small. All mining activity accounts for only 1.3 percent of the basic employment in the county.

According to the California Department of Finance Labor Force and Employment Report (2006), total employment in the mineral resource industry in the county has increased from 3300 employees in 1993 to 7700 employees in 2005.

# EMPLOYMENT IN SAN LUIS OBISPO COUNTY'S MINING INDUSTRY BY YEAR

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3300	3500	4100	4200	4400	5000	6500	6100	6700	6800	6900	7200	7700

Employment in the mineral industry grew by 57% in 12 years. Local demand is the primary factor in the production of sand, gravel, and stone. This activity is directly related to growth trends and construction needs. Production has fluctuated in proportion to the economic activity in the county.

Reported payrolls for last year totaled \$1.5 million. Additional, but undetermined, contributions to the county's economy are also made indirectly by the local provision of rock, sand, and gravel to the construction industry.

<sup>&</sup>lt;sup>2</sup> This information is updated from the 1974 Conservation Element

#### **CONSERVATION ISSUES**

Consideration of surface mining in relation to comprehensive land use planning involves conflicting objectives. Sound planning seeks to: 1) make available mineral resources for industrial use; 2) conserve minerals; 3) protect residential areas from noise, dust, vibration, traffic, or esthetic impact; 4) reclaim worked-out mines for new land use that will fit a comprehensive plan; and 5) avoid excessive damage to environmental and scenic resources.

The community must somehow balance the objectives and conflicts to achieve a favorable plan for the public's general welfare. Strict economics are no longer the only consideration in planning and decision making. Many problems and conflicts must be considered when dealing with the impact of mineral exploration and energy production.

#### **Land Use**

A significant conflict which arises through the need for mineral extraction is competition between land uses. Prior to actual need for extraction of the mineral, there is the possibility of preemption of the site by other land uses. This suggests the need to define mineral preserves for selected resources at desirable locations. The County General Plan's EX combining designation identifies areas where mineral exist.

During the extraction process, there can be major problems created through subsidence at the site, landslides, waste disposal, and loss of scenic values. Definitive controls must be placed upon mining operations to reduce the impact of these disruptions.

After the mineral deposit has been exhausted, there remain the major disruptions created by the mining operations: the pit, mine shafts, or abandoned wells; the slag heaps, or mounds of overburden; and the large barren sterile area around the site. Prevention of these disruptions of the land and reversion of the land to a useful state require reclamation measures that are carried out through conditions for mining approval. Phasing schedules and bonding measures may also be applied. Imaginative planning can be used in making proposals for reclamation of abandoned sites, and these should be included as part of the original application.

#### **LAND USE CONFLICTS**

As with all types of industrial endeavors, conflicts with adjacent land uses may at times create serious problems for mining activities. Some of the difficulties originate from the nature of the extraction process, which may involve dust, noise, vibration, or odor problems for neighboring areas. Conflicts also arise if a source of air or water pollution exists as a result of the extraction process. Pollution in any form is a major issue, which can create far-reaching public reaction.

In addition to conflicts emanating from the site, problems may also be created along access routes. Dust, noise, and traffic problems along access routes are secondary conflicts, which

also may be controlled through Conditional Use Permits. Proper siting of preserves and route selections, as well as control of adjoining land uses are other means of preventing conflicts.

Certain problems, such as visual impacts created during and after mining activities, are inherent in any mining operation, but their impacts are also regulated. Public and employee safety are other issues which arise in any industrial operation. These are for the most part administered by higher level agencies, although input by local entities is certainly considered.

Establishment of a mineral extraction operation can lead to pressures for associated land uses. The locations of resource-oriented industries are determined in the same manner as other types of land use, and are, in most cases, restricted to industrially zoned areas. In some cases an extractive operation requires certain processing or refining activities to be situated close at hand. In other cases, as with asphalt plants, the industry is located close to the resource. Pressures for establishing associated industries sometimes occur after an industrial use is established. This factor should be an additional consideration when land use decisions relating to natural resources are made.

Somewhat related to land use conflicts is the increasing demand for energy and fuels and the subsequent pressures for increased production. Consumption increases result in greater land use requirements devoted to production.

# **Regulatory Structure**

#### **STATE AND FEDERAL**

All levels of government perform regulatory functions in regard to mining operations. The nature of the regulation includes such items as land use, taxation, employee safety, groundwater protection, and transportation. In addition to regulation, government also provides an advisory service, and acts as a clearinghouse for statistics and information. At the Federal level, the U.S. Bureau of Mines performs these services; and at the State level it is the State Division of Mines and Geology.

Standards and regulations are applied by the State Division of Industrial Safety, the Public Utilities Commission, and the State Division of Oil, Gas. Administration of public lands and regulation of mining activities on those lands is the responsibility of the U.S. Bureau of Land Management and the U.S. Forest Service.

#### **COUNTY REGULATION**

One of the means a county has of regulating mining practices and petroleum extractions is through the use of land use regulations. In general, a Conditional Use Permit is required to establish a mining operation in those land use categories in which mines and quarries are

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allowable. The County General Plan Land Use Element has established the EX (Energy and Extractive Area) combining to identify where<sup>3</sup>:

- 1) Minerals or petroleum extraction occurs or is proposed to occur;
- 2) The state geologist has designated a mineral resource area of statewide or regional significance.

According to Land Use Ordinance section 22.14.040, the purpose of this combining designation is to: protect significant resource extraction and energy production areas identified by the Land Use Element from encroachment by incompatible land uses that could hinder resource extraction or energy production operations, or land uses that would be adversely affected by extraction or energy production.

In addition to the EX designation, there is a companion EX1 designation for mineral extraction. According to Land Use Ordinance (LUO) section 22.14.050, the EX1 designation is used to identify areas of the county which the California Department of Conservation's Division of Mines and Geology has classified as containing or being highly likely to contain significant mineral deposits. The LUO also states that the purpose of the EX1 is to protect existing resource extraction operations from encroachment by incompatible land uses that could hinder resource extraction.

The industrial processing of mineral resources and construction materials is regulated by the Land Use Ordinance. Regardless of the use involved, the Conditional Use Permit process may control noise, vibration, setbacks, and aesthetic or visual impacts, among other possible conditions.

Air pollution regulations are enforced by the County Air Pollution Control District. This agency administers the State Air Quality Standards, monitors dust, and smoke, and requires the installation of preventative systems.

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<sup>&</sup>lt;sup>3</sup> Land Use Ordinance section 22.14.040